

SELF ATTENDANCE USING OTP IN ANDROID

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ABSTRACT

A Attendance is very important for every organizations, Attendance taking has evolved with better solutions from the time it was invented, from paper based to Computer based System using so many new technologies that can make it better faster and accurate. In our proposed system we make use of Self attendance using OTP. In this system there are 3 Main users; Admin responsible to add class, subjects, teachers and students; second teacher who will take the attendance and the third Student who can mark him/her as present and see their previous attendance records. The process goes like this, the teacher select the class for attendance a OTP is generated which will last for 60 seconds, the OTP need to be entered in the Student's app and mark him/her as present, once the OTP is expired the teacher can make the necessary changes in the attendance sheet and submit the attendance.

KEYWORDS

Network Protocols, Wireless Network, Mobile Network, Virus, Worms & Trojon

1. INTRODUCTION

Attendance is very important for every organizations, Attendance taking has evolved with better solutions from the time it was invented, from paper based to Computer based System using so many new technologies that can make it better faster and accurate. In our proposed system we make use of Self attendance using OTP. In this system there are 3 Main users; Admin responsible to add class, subjects, teachers and students; second teacher who will take the attendance and the third Student who can mark him/her as present and see their previous attendance records. The process goes like this, the teacher select the class for attendance a OTP is generated which will last for 60 seconds, the OTP need to be entered in the Student's app and mark him/her as present, once the OTP is expired the teacher can make the necessary changes in the attendance sheet and submit the attendance.

Taking attendance with android based system makes faster and better. In this all can make use of self attendance using OTP. The respective staff generate an OTP which lasts for 30 sec attendance very important for every organizations, Attendance taking has evolved with better solutions from the time was invented, from paper based to Computer based System using so many new technologies that can make better faster and accurate. In our proposed system we use of Self attendance using OTP. In this system there are 3 Main users; Admin responsible to add class, subjects, teachers and students; second teacher will take the attendance and the third

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The second section discuss about the literature review and continued by problem statements. The fourth section gives the experiments and results followed by the conclusion and future enhancement

2. LITERATURE SURVEY

K. Akhila¹ and B. Prathyusha (2013),

A Education system in India has been changing widely in last 10 years due to the development of the technology. Smart class, E-learning, Video conferencing are some of them. The core idea of this paper is to implement some of the emerging technologies like mobile computing and near field communications and advances in behavioral science studies to make a better educational system. This paper will be implemented in application as two parts. A secure framework for implementing different educational service mobile applications like, mobile attendance, mobile marks register etc by using Android and java applications . The second part will leverage Near Field Communication technologies and gamification behavior approach to incorporate game mechanics into activity oriented learning systems. To update the all data through web server by using GPRS technology.Indian Institute of Education, Pune.(2006)

Monika Singh (2017),

The main objective of this paper is to carry out some of the emerging technologies like mobile computing, Information and Communication Technology and advances in behavioural science studies to enhance and enriched the current educational system scenario, since the educational technology in India has been get modernizing in the recent past years due to the development and penetration of Information and Technology. The mobile based technology has been chosen for this study as well as for the project. The methodology of this work is to developed an android based mobile application attendance management system where attendance can be recorded via mobile devices using "php" and "MySQL" server .This developed software stores ,retrieves and deliver the information about the student information such as present or absent through mobile device in the provided server database. The final result of this project are very useful for the educational organizations to keep ,track and maintain the database of students.

Dhinam Kumar Sarker(2016),

In the system the teacher can call the student by their name or identity number of the student which the student can respond or can pass the attendance sheets to login. To overcome this process this represents the attendance system prototype. The radio frequency identification and the process of getting integrated system of reliable attendance management system is been developed in the programming language to monitor the attendance system.

M. PavanKumar(2017),

Our project is an efficient and user friendly Android mobile application for an Attendance Monitoring. The application will be installed on the user's (in this case teacher's) smart phone. It intends to provide an interface to the teacher who will require minimal details to input for

marking of attendance of a particular class of students. Apart from that, the application would support strong user authentication and quick transmission of data via the web service. Another noticeable feature of the entire application would be that no data would be stored on the user device in any form whatsoever. The application thus build would also help to avoid the chance of a proxy as the application would be handled by the teacher only.

Amrutha(2020),

We have seen over the years that the process of manual attendance has been carried out across almost all educational institutions. The process is not only time consuming but also sometimes inefficient resulting in the false marking of attendance. Today, we need not maintain pen and paper based attendance registers. Following this thought, we have proposed an attendance monitoring system based on the concept of web services which is implemented as an Android mobile application that communicates with the database residing on a remote server. The mobile application would require connecting to the database using either General Packet Radio Service(GPRS) or Wi-Fi technology. This paper discusses the proposed system, overview of the design, the various modules of the system and its implementation.

3. PROBLEM STATEMENT

A. Architecture Diagram

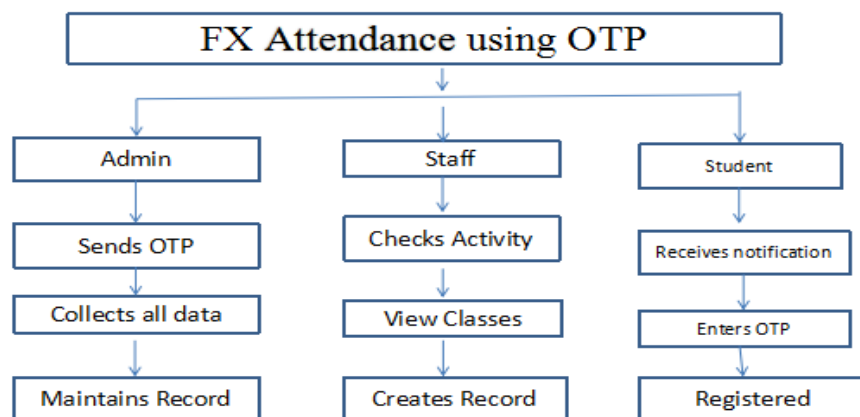


Figure-1 Architecture Diagram

B. Existing System

- User login in and make the attendance which is not used securely.
- Anyone can able to login and mark on the attendance.
- Physical taking attendance are available in present days.
- Wastage of time.

C. Proposed System

- This application allow the user to mark attendance based on the OTP.

- The student needs to login and and enter the OTP received.
- In this system on using OTP malpractice is avoided by verification
- User can able to view attendance Percentage on Monthly wise.

4. EXPERIMENTS AND RESULTS

A. Module Description

The system comprises of 3 major modules with their sub-modules as follows:

1. Admin: (Web Application)

- Login: Need to enter login credentials into web interface by the admin or the authorized person.
- Add/View Course: Can add a new course into the system and also can view it.
- Add/View Subject: Can add a new subject to the equivalent course into the system and also can view it.
- Add/View Student: Can register new student details into the system and also can view it.
- Attendance Report: System allows admin to generate student defaulters list

2. Teacher: (Android)

- Login: Here, teacher need to enter the login credentials into android app in order to mark the attendance.
- Generate OTP: Teacher will generate an OTP which will be visible for 60 seconds and take attendance
- View Attendance: Teacher will be able to view student attendance of students.

3. Student: (Android)

- Login: Here, both Parent as well as student can login using the student
- L;roll no. or with an email id.
- Mark Attendance: Once OTP is generated by the teacher, students can input the OTP in their application to get their attendance marked.
- View Attendance: Here, student itself can view the attendance.

B. Output Screen

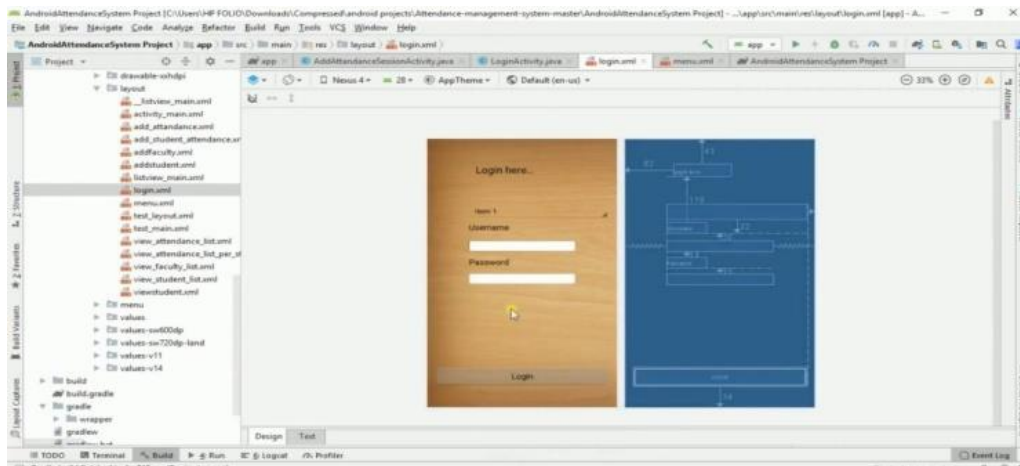


Figure-2 DashBoard

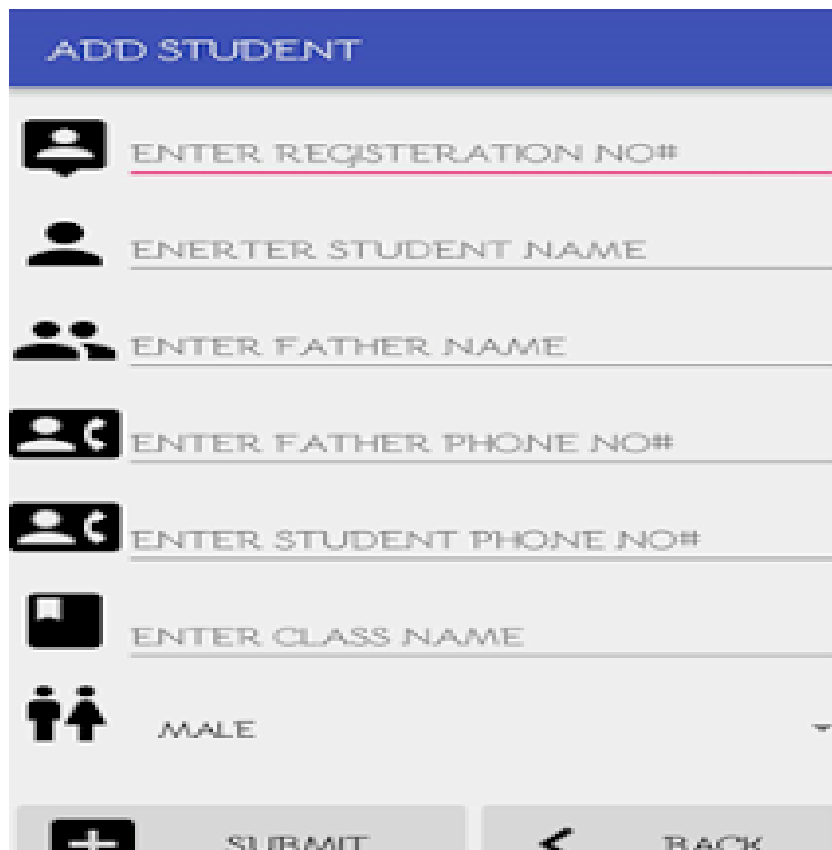


Figure -3 Register and Login Page

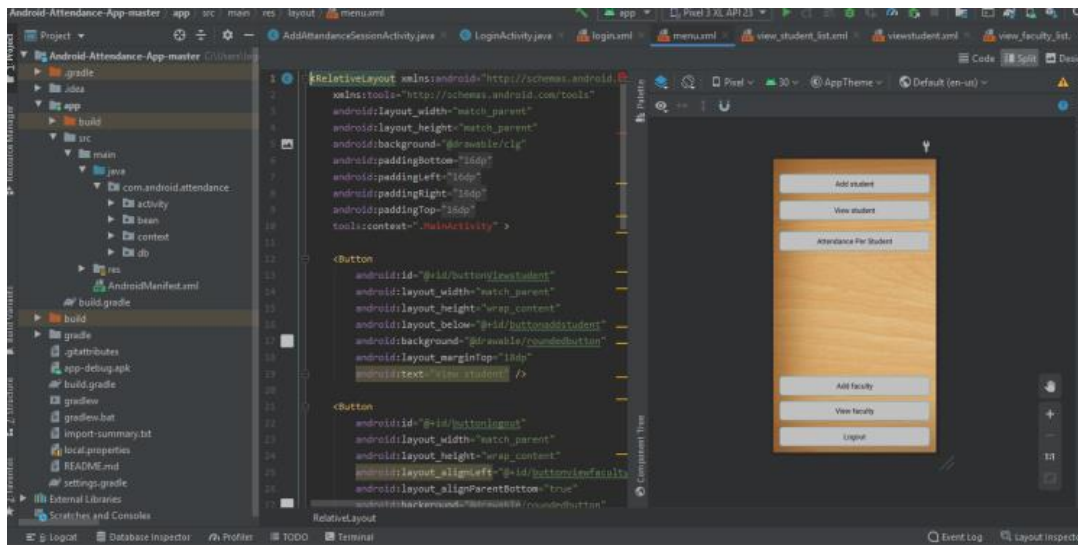


Figure-4 Add Staff and Student

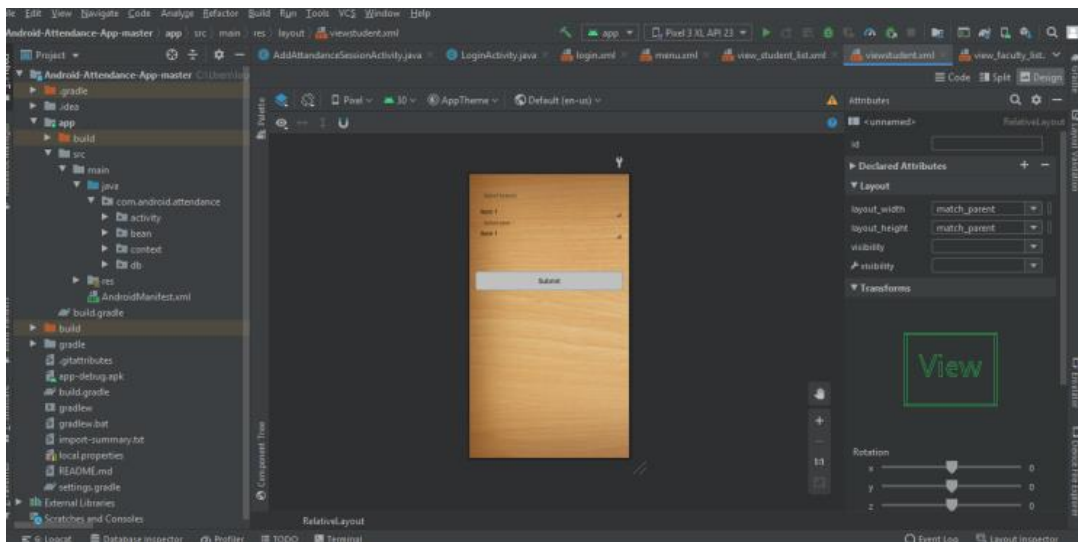


Figure-5 View members

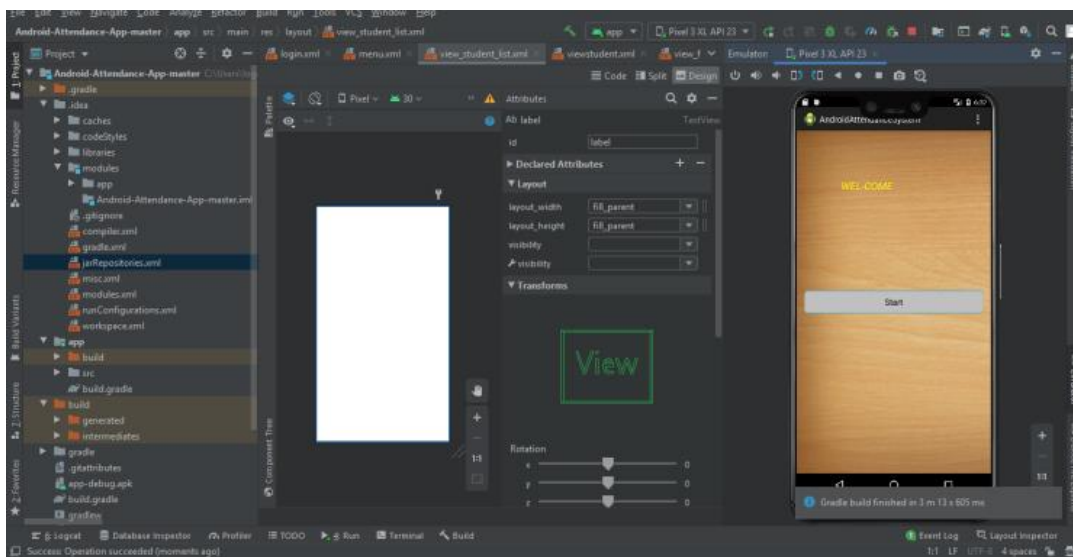


Figure-6 Front Page

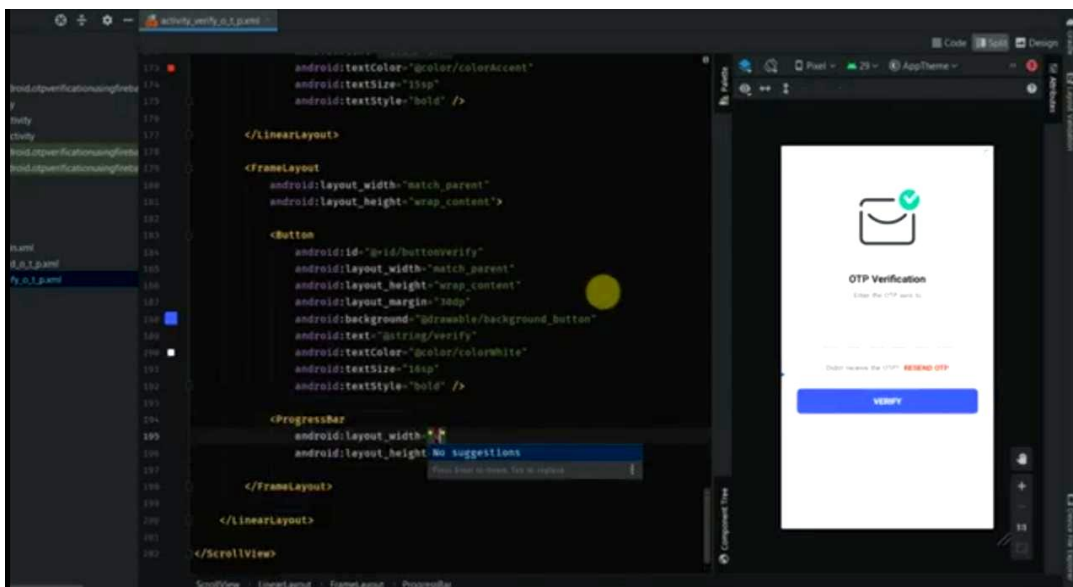


Figure-7 Sending OTP

C. Performance Analysis

The existing and proposed system are analysed. The problem identified is User login in and make the attendance which is not used securely. Anyone can able to login and mark on the attendance and Wastage of time but .Nearly 70% performance has been increased by using the OTP system. Which make more accurate attendance

5. CONCLUSION

This system is a new age, verified, well tested, promising, cost effective and technologically sound. That marks a bar for a cheat free Attendance system making cheating unappealing and

easily detectable. Attendance system as build under this research has cleared out discrepancy in storage of data and also false attendance pattern. This attendance system has reduced all the time taking manual work that the lecturer had to go through before starting the lecture.

6. FUTURE ENHANCEMENT

After In future, this application can be featured comment boxes or group chat, so that students who hesitate to ask doubts in the classroom, may is etheir doubts in the web application. Also, assignments can be posted by lecturer and the work of students can be monitored frequently via the application. Assessments like Quiz, learning agility test, etc., can be established in the application.

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